

CALIFORNIA STATE DEPARTMENT OF PUBLIC HEALTH

WALTER M. DICKIE, M.D., Director

Weekly Bulletin



STATE BOARD OF PUBLIC HEALTH

GEORGE E. EBRIGHT, M.D., President

FRED F. GUNDRUM, M.D., Vice President

A. J. SCOTT, Jr., M.D. ADELAIDE BROWN, M.D. EDWARD F. GLASER, M.D.

ROBERT A. PEERS, M.D.

WALTER M. DICKIE, M.D.

Entered as second-class matter February 21, 1922, at the post office at Sacramento, California, under the Act of August 24, 1912. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917.

Vol. IX, No. 18

June 7, 1930

GUY P. JONES
EDITOR

Status of Epidemic Poliomyelitis

There have been 86 cases of acute anterior poliomyelitis reported in California since the first of the year. The distribution of these cases, by months, is as follows:

January	17
February	3
March	12
April	16
May (first 3 weeks)	38

Since many cases are not recognized as acute anterior poliomyelitis, it is important that all cases which may be at all suspicious of this disease be recognized and placed under control without delay.

It has been observed that in those years when poliomyelitis becomes unusually prevalent in the late spring and early summer, there is nearly always an extensive and disastrous outbreak of the disease in the late summer and early fall, when under normal conditions, the disease is seasonally more prevalent. The prompt institution of control measures at the present time, therefore, is of the utmost importance in order that the chances for a widespread epidemic during the coming fall may be minimized.

Poliomyelitis, perhaps, is one of the most common of the communicable diseases. Since paralysis occurs, however, in but a small percentage of cases, proper diagnosis is very often not made. Whenever the disease becomes epidemic, all cases of sudden, acute illness in children must be regarded with suspicion. It should be remembered that poliomyelitis is not essen-

tially a disease of the central nervous system. It is only in a relatively small number of cases that there is any invasion of the central nervous system. Paralysis is purely an accidental and incidental occurrence, and in reality it occurs rarely. Seventy or eighty per cent of all cases of this disease present merely the aspect of an acute generalized affection without sign of injury to the central nervous system. Environment and social conditions have little bearing upon the appearance of the disease, and it occurs as commonly in sparsely settled rural districts as in crowded cities. It is caused by a filterable virus which is unknown apart from infected human beings. This virus possesses a high degree of resistance, both to cold and to ordinary degrees of heat, for long periods of time. If enclosed in albuminous matter it withstands drying quite readily. Since it can withstand both moist and dry conditions, it can easily be carried into the respiratory tract as a spray produced by coughing, sneezing, etc. It is doubtful if agents, other than man, play any conspicuous part in the transmission of the disease. Poliomyelitis is a human borne, contagious infection, with its portal of entry in the upper respiratory tract, especially in the naso-pharyngeal mucous membrane.

For the sake of safety, cases of severe intestinal disturbances or of common colds, occurring especially in young children, at the present time should be regarded with suspicion. They should, accordingly, be isolated without delay and isolation should be maintained at least until the nature of the illness is

definitely determined. The age of the patient should not be considered in making diagnosis. While most cases occur in children around two years of age, many adolescents and young adults are attacked. The younger children seem to weather the acute stages better than adolescents and young adults, among whom the death rate is especially high. Since the adult carrier is known to play an important part in the transmission of the disease, it is important that whenever a case of poliomyelitis occurs in a family, all members, as well as other contacts, be isolated for two weeks, as required under the regulations of the California Department of Public Health. Cases of poliomyelitis must be quarantined for a period of three weeks.

For your information, a brief outline of the symptoms and etiology of the disease is appended:

Onset: The disease begins suddenly with a temperature of from 101 to 103. There is generally pain or tenderness in the back of the neck, back, arms and legs. In young children, vomiting and diarrhea may usher in the attack, although constipation is more often present. In older children, headache and muscle pains are generally found. Sometimes the first symptom is that of lassitude or drowsiness; sometimes interrupted by periods of great restlessness or even convulsions.

The Paralytic Stage: After the systemic phase, lasting a few days at the most, there may be a period of improvement, or the disease may go directly into the paralytic stage. In about 75 per cent of the cases in which paralysis appears, it comes on or before the fourth day of illness. Sometimes the paralysis can be discovered only by careful searching. It may be limited to a single muscle or a part of a single muscle, a group of muscles or it may be general. In most cases the paralysis is partial rather than complete.

The classification of poliomyelitis, which is most useful from a clinical standpoint, in that it gives the different forms as they are met with in practice, is as follows:

1. The spinal poliomyelitic form.
2. The meningitic.
3. The encephalitic.
4. The form resembling Landry's paralysis.
5. The abortive.
6. The bulbar or Pontine form.
7. The ataxic.
8. The polyneuritic (resembling neuritis).

The spinal poliomyelitic form is the common form which is generally encountered. The meningitic form is the one which is predominating at the present time

and offers greatest difficulty in diagnosis. Frequently, this form can only be differentiated from meningitis by making spinal puncture and finding the specific organisms of meningitis in the spinal fluid. The meningitic form is very fatal and the paralysis which accompanies it is of the spastic rather than the flaccid type.

Those cases showing early paralysis of the laryngeal muscles offer great difficulty in differential diagnosis between poliomyelitis and diphtheritic paralysis. Many of these cases of throat paralysis develop paralysis of the muscles of respiration and practically all terminate fatally.

The encephalitic type must be distinguished from the so-called sleeping sickness or encephalitis. The type resembling Landry's or ascending paralysis is not so difficult of diagnosis as the early paralysis is in the lower extremities, the paralysis gradually extending to the muscles of the trunk and upper extremities. The so-called abortive type is probably the most dangerous type from the health officer's standpoint. It can be safely said that for every paralytic case which is encountered, there have been fifteen cases of the nonparalytic type.

Treatment: The only treatment in the early stage of the disease, that is, when the temperature is elevated and the patient suffering from pain and tenderness in the paralyzed part, should be absolute rest, only, and no physical or mechanical interference whatsoever. The many forms of massage and electrical treatment should be postponed until all constitutional symptoms have disappeared and the patient no longer suffers from pain or tenderness. The only active treatment of a paralyzed limb during the acute stage should be rest, in an effort to keep the limb in as normal condition as possible. In hospital practice it is now the custom to place paralyzed limbs in a plaster cast and keep the patient absolutely quiet.

Serum from recovered cases of poliomyelitis is used in the treatment of this disease. It is considered advisable to take blood from only the paralytic cases. This blood may be taken any time after the temperature has returned to normal, and it has been taken as long as ten years after recovery. While whole blood may be given intramuscularly in emergencies the recommendation is that about thirty cubic centimeters of the convalescent serum be given intramuscularly, as early in course of the disease as possible.

Cases suspected as those of poliomyelitis should be reported to the local health officer without delay. Cooperation in this matter is of the utmost importance, in order that the children of California may receive the protection to which they are entitled.

STATE MENTAL HYGIENE SURVEY DESIRES ASSISTANCE OF PUBLIC HEALTH NURSES

The State Mental Hygiene Survey, of which Dr. Frederick H. Allen is director, desires the assistance of public health nurses throughout the state in securing information relative to mentally sick psychiatric problems which public health nurses may encounter in their daily routine. The director of the survey desires particularly to know the extent of the various types of problems associated with mental hygiene but does not desire to obtain accurate statistics. A general estimate of the number of cases or types of mental illness is needed. The information desired may cover the past six months in the nurses' experience or, if the data for such period are not available, the information may cover only the month of June. The explicit information desired may be outlined as follows:

1. Estimated number of cases under observation or for whom assistance was asked *insane*, including delirious conditions associated with physical sickness.
2. Estimated number of cases under observation or for whom assistance was asked of *mental defectives*—children and adults.
3. Estimated number of cases under observation or for whom assistance was asked of *problem children*—delinquents, temper tantrums, habit problems, etc.
4. Estimated number of cases under observation or for whom assistance was asked of *problems in family relationships*.
5. A statement of *lack of facilities* for proper handling of the above problems.

The survey would also like to learn of any public health nurses who may have had courses in psychiatry or mental hygiene, and would also like to know of any local facilities that may be available in local communities for such training of nurses. Information relative to these matters should be sent to Dr. Frederick H. Allen, Director of the State Mental Hygiene Survey, 118 State Building, San Francisco.

DR. FIELDS ENTERS TWENTY-SEVENTH YEAR AS HEALTH OFFICER

Dr. David B. Fields of Weaverville, Health Officer of Trinity County, has just been appointed health officer of that county for the twenty-seventh consecutive year. It is doubtful if any other health officer in California has served continuously as the health officer of any city or any county of California for a longer term of years.

Science repulses the indefinite.—*Claude Bernard*.

IMPERIAL ORGANIZES FULL-TIME COUNTY HEALTH UNIT

The board of supervisors of Imperial County have organized the health department of that county upon a full-time basis. They have provided an annual budget of more than \$15,000 and have appointed Dr. Warren Fox, formerly city health officer of Pasadena and more recently connected with the Los Angeles County Health Department, as health officer of Imperial County. Dr. Fox will have adequate assistance in public health nurses, dairy and milk inspector, sanitary inspector and laboratory technician in addition to office and clerical help. The U. S. Public Health Service will be responsible for a small portion of the annual budget but most of the funds are provided by the county board of supervisors. Imperial is the fourteenth California county to organize upon a full-time basis.

Today we take for granted the silence of the operating room, but to reach this Elysium we had to travel the slow road of laborious research, which gave us first the chemical agents; and then brave hearts had to risk reputation, and even life itself, in experiments, the issue of what was for long doubtful.—*Osler*.

MORBIDITY*

Diphtheria.

58 cases of diphtheria have been reported, as follows: Oakland 2, Los Angeles County 6, Glendale 2, Los Angeles 25, San Gabriel 1, Whittier 1, Torrance 1, Napa County 1, Santa Ana 1, Riverside 2, Sacramento County 2, Sacramento 2, Needles 1, San Diego 2, San Francisco 4, Benicia 1, Tehama County 1, Tulare County 2, Yolo County 1.

Scarlet Fever.

94 cases of scarlet fever have been reported, as follows: Oakland 7, San Leandro 1, Butte County 2, Pittsburg 1, Fresno County 1, Fresno 1, Reedley 1, Los Angeles County 1, Avalon 1, Burbank 1, Huntington Park 1, Los Angeles 15, Pomona 1, South Gate 2, Maywood 1, Marin County 1, San Rafael 1, Sausalito 1, Monterey County 1, Salinas 1, Santa Ana 2, Sacramento County 12, Sacramento 5, San Benito County 2, Redlands 1, San Diego 1, San Francisco 8, Stockton 2, San Luis Obispo County 1, Arroyo Grande 2, San Luis Obispo 1, Santa Clara County 4, Palo Alto 1, Stanislaus County 1, Sutter County 1, Yuba City 2, Marysville 6.

Measles.

1977 cases of measles have been reported, as follows: Alameda County 6, Berkeley 74, Hayward 1, Oakland 153, San Leandro 8, Butte County 28, Colusa County 1, Contra Costa County 12, Concord 2, El Cerrito 1, Martinez 17, Pittsburg 7, Fresno County 28, Fresno 10, Imperial 4, Bakersfield 3, Hanford 6, Los Angeles County 216, Alhambra 46, Azusa 2, Beverly Hills 4, Burbank 1, Claremont 8, Compton 15, Covina 4, Culver City 9, El Monte 13, El Segundo 17, Glendale 39, Huntington Park 23, Inglewood 16, Long Beach 77, Los Angeles 236, Manhattan 2, Monrovia 5, Pomona 26, Redondo 8, San Fernando 5, San Gabriel 12, Santa Monica 16, South Pasadena 13, Whittier 17, Torrance 8, Lynwood 3, Hawthorne 1, South Gate 20, Monterey Park 7, Maywood 7, Tujunga 1, Bell 26, Gustine 1, Los Banos 24, Merced 6, Monterey County 7,

* From reports received on June 2d and 3d for week ending May 31st.

Orange County 25, Anaheim 6, Brea 2, Fullerton 10, Orange 3, Santa Ana 39, La Habra 3, Tustin 2, Riverside County 4, Riverside 69, Sacramento County 37, Sacramento 26, Colton 13, Ontario 18, Redlands 7, Upland 9, San Diego County 1, La Mesa 2, National City 1, San Diego 82, San Francisco 70, San Joaquin County 34, Stockton 50, Santa Barbara 35, Santa Clara County 34, Palo Alto 8, San Jose 6, Mount Shasta City 1, Benicia 5, Sonoma County 1, Stanislaus County 7, Turlock 3, Tehama County 3, Corning 1, Red Bluff 1, Tulare County 5, Dinuba 26, Lindsay 4, Visalia 2, Santa Paula 9, Yolo County 3, Woodland 4, Yuba County 1, Marysville 3.

Smallpox.

35 cases of smallpox have been reported, as follows: Alpine County 1, Imperial 2, Los Angeles County 1, Glendale 1, Los Angeles 3, Pomona 1, Santa Monica 1, Madera 1, Plumas County 1, Riverside County 1, Sacramento 6, San Diego 1, Santa Barbara 5, Stanislaus County 2, Turlock 3, Sutter County 2, Tulare County 2, Santa Paula 1.

Typhoid Fever.

13 cases of typhoid fever have been reported, as follows: Los Angeles County 2, Long Beach 2, Los Angeles 2, Santa Monica 1, Riverside 1, San Francisco 1, Santa Barbara 1, Tulare County 2, California 1.**

Whooping Cough.

206 cases of whooping cough have been reported, as follows: Livermore 3, Oakland 11, Contra Costa County 2, Fresno County 3, Fresno 10, Bakersfield 1, Hanford 2, Los Angeles County 22, El Segundo 5, Huntington Park 3, Long Beach 15, Los Angeles 21, Montebello 2, Pomona 5, Santa Monica 1, South Pasadena 2, Lynwood 2, South Gate 2, Maywood 1, Bell 1, Madera County 13, Orange County 7, Anaheim 3, Fullerton 2, Orange 1, Santa Ana 1, Laguna Beach 3, Pla-

centia 3, Riverside County 3, Riverside 2, Sacramento County 1, Sacramento 4, Colton 3, Ontario 1, Redlands 1, San Diego 28, San Francisco 1, San Joaquin County 3, Lodi 2, Stockton 4, San Luis Obispo County 3, Palo Alto 1, Dinuba 1, Visalia 1.

Meningitis (Epidemic).

6 cases of epidemic meningitis have been reported, as follows: Reedley 1, Los Angeles County 2, Los Angeles 1, Lynwood 1, San Diego 1.

Leprosy.

Los Angeles County reported one case of leprosy.

Trichinosis.

2 cases of trichinosis have been reported, as follows: San Francisco 1, Santa Clara County 1.

Food Poisoning.

South Gate reported three cases of food poisoning.

Undulant Fever.

Kingsburg reported one case of undulant fever.

Tularemia.

San Jose reported two cases of tularemia.

Poliomyelitis.

15 cases of poliomyelitis have been reported, as follows: Imperial County 1, Los Angeles County 1, Alhambra 4, Huntington Park 1, Los Angeles 3, Placentia 2, San Diego 1, Tulare County 2.

** Cases charged to "California" represent patients ill before entering the state or those who contracted their illness traveling about the state throughout the incubation period of the disease. These cases are not chargeable to any one locality.

COMMUNICABLE DISEASE REPORTS

Disease	1930				1929			
	Week ending			Reports for week ending May 31 received by June 3	Week ending			Reports for week ending June 1 received by June 4
	May 10	May 17	May 24		May 11	May 18	May 25	
Chickenpox	349	387	301	323	711	616	497	406
Coccidioidal Granuloma	0	1	1	0	0	1	2	1
Diphtheria	58	51	58	58	44	51	54	51
Dysentery (Amoebic)	1	0	3	0	0	7	3	1
Dysentery (Bacillary)	1	2	0	1	2	3	0	0
Encephalitis (Epidemic)	1	0	1	0	0	0	2	0
Erysipelas	13	17	8	6	16	16	21	22
Food Poisoning	0	4	3	3	0	1	0	0
German Measles	14	13	9	9	36	38	31	32
Gonococcus Infection	117	126	91	90	92	100	95	55
Hookworm	0	0	1	0	0	2	0	0
Influenza	22	30	9	18	30	57	34	16
Leprosy	1	0	0	1	1	1	0	0
Malaria	2	2	2	0	1	5	1	1
Measles	2,220	2,177	2,325	1,977	122	132	148	133
Meningitis (Epidemic)	2	5	4	6	22	18	22	14
Mumps	744	714	683	576	587	695	368	398
Ophthalmia (Neonatorum)	0	0	0	1	1	0	1	1
Paratyphoid Fever	1	0	1	0	0	0	0	0
Pellagra	2	6	2	2	0	1	2	0
Pneumonia (Lobar)	50	53	45	33	47	50	49	42
Poliomyelitis	12	15	13	15	3	5	3	3
Rabies (Animal)	11	18	13	9	15	12	17	17
Rocky Mt. Spotted Fever	0	0	0	0	0	4	0	0
Scarlet Fever	134	152	128	94	447	407	457	296
Smallpox	69	62	78	35	74	52	67	28
Syphilis	134	119	135	104	178	120	178	90
Tetanus	0	0	1	0	1	0	2	1
Trachoma	2	4	1	2	3	3	4	0
Trichinosis	2	0	0	2	0	0	0	0
Tuberculosis	236	237	237	227	217	235	257	162
Tularemia	0	0	0	2	0	1	1	0
Typhoid Fever	11	9	19	13	14	9	7	5
Undulant Fever	3	0	2	1	2	0	0	3
Whooping Cough	279	298	260	206	294	344	341	237
Totals	4,491	4,502	4,434	3,814	2,960	2,986	2,934	2,015

Acute anterior poliomyelitis maintained its rise again last week.

Measles show a slight decrease but still running high.

Smallpox dropped considerably last week.

Trichinosis cases were reported again last week.